

# Multi-Year Plan Projected Need (8000)

(No. 9 Sept. 1995)

March 16, 1995

## MULTI-YEAR PLAN PROJECTED NEED

### CDF TELECOMMUNICATIONS

	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	Total
NORMAL EQUIP REPLACEMENT	\$4,848,471	\$4,848,471	\$4,848,471	\$4,848,471	\$4,848,471	\$4,848,471	\$4,848,471	\$4,848,471	\$4,848,471	\$4,848,471	\$48,484,711
EXES-TD Champs & Maint.	\$8,589,529	\$8,589,529	\$8,589,529	\$8,589,529	\$8,589,529	\$8,589,529	\$8,589,529	\$8,589,529	\$8,589,529	\$8,589,529	\$85,895,290
RADIO BACKLOG ("Total Below")	\$2,802,580	\$2,802,580	\$2,802,580	\$2,802,580	\$2,802,580	\$2,802,580	\$2,802,580	\$2,802,580	\$2,802,580	\$2,802,580	\$28,025,800
TELEPHONE BACKLOG	\$83,000	\$83,000	\$83,000	\$83,000	\$83,000	\$83,000	\$83,000	\$83,000	\$83,000	\$83,000	\$830,000
MICROWAVE BACKLOG	\$240,000	\$240,000	\$240,000	\$240,000	\$240,000	\$240,000	\$240,000	\$240,000	\$240,000	\$240,000	\$2,400,000
DIGITAL TRANSITION	\$1,420,427	\$1,420,427	\$1,420,427	\$1,420,427	\$1,420,427	\$1,420,427	\$1,420,427	\$1,420,427	\$1,420,427	\$1,420,427	\$14,204,270
<b>Total</b>	<b>\$17,984,007</b>	<b>\$17,984,007</b>	<b>\$17,984,007</b>	<b>\$17,984,007</b>	<b>\$17,984,007</b>	<b>\$17,984,007</b>	<b>\$17,984,007</b>	<b>\$17,984,007</b>	<b>\$17,984,007</b>	<b>\$17,984,007</b>	<b>\$179,840,067</b>

This plan will allow for a sound equipment replacement program, eliminate backlog, provide limited expansion and provide appropriate supporting capital outlay. It will NOT provide for total expansion needs, nor does it allow for normal increases in the consumer price index. Without normal inflation rates, the equipment backlog will grow without the remaining system equipment needs addressed, it will cost approximately \$179,840,070 over a ten-year period (\$17,984,007 per year) along with increases in the base budget to allow for replacement of equipment. This plan includes CDF's Telecommunications base budget of approximately \$8,031,884 each year. This plan does NOT reflect personnel costs which are currently \$277,722 per year.

### \*Radio Backlog Detail

Equipment	Units	Equip Cost	Install Cost	Total
Mobile Radios	600	\$2,500	\$135	\$1,561,000
Portable Radios	400	\$2,500	\$65	\$825,000
Mobile Radios	40	\$1,500	\$10	\$700,000
Radio Trans-Elec	18	\$17,000	\$2,000	\$290,000
Radio Monitor	65	\$1,000	\$2,000	\$185,000
Remote Control	90	\$500	\$640	\$102,600
Aircraft Radios	18	\$39,000	\$2,000	\$738,000
Paging Encoders	10	\$5,000	\$6,000	\$110,000
Cenoses	18	\$117,000	\$69,000	\$3,006,000
PA System	69	\$1,000	\$2,000	\$189,000
Fire Station Radios	90	\$3,000	\$13,000	\$1,260,000
ECC Display Equip.	10	\$35,000	\$0	\$350,000
Logging Receivers	6	\$37,000	\$2,500	\$237,000
Antennas Radios	224	\$1,800	\$1,000	\$270,000
Power Supply	6	\$30,000	\$5,000	\$170,000
Radio VHF	48	\$35,000	\$6,000	\$1,584,000
Generators	35	\$30,000	\$90,000	\$8,250,000
Radio Towers	46	\$90,000	\$2,500	\$4,410,000
Weather Stations	20	\$30,000	\$6,000	\$1,800,000
Type Receivers	18	\$3,000	\$6,000	\$162,000
<b>Total Radio Backlog</b>				<b>\$28,025,800</b>

### Telephone and Microwave Backlog Detail

Telephone Systems	1	\$300,000	\$300,000
Stat. HDS	5	\$45,000	\$225,000
RU Region	90	\$2,500	\$225,000
En Station	4	\$25,000	\$100,000
EDC %			\$830,000
Microwave Service			
Equipment	8	\$175,000	\$1,400,000
Installation	8	\$125,000	\$1,000,000
			\$2,400,000
Summary			
Telephone Backlog			\$830,000
Microwave Backlog			\$2,400,000
Radio Backlog			\$28,025,800
<b>Total Backlog</b>			<b>\$31,255,800</b>

A comprehensive Telecommunications Plan, detailing all program aspects, is available upon request.

## TELECOMMUNICATIONS NORMAL REPLACEMENT PLAN

MARCH 16, 1995

ITEM	INVENTORY	LIFE EXP. (YRS)	NORMAL ANNUAL REPLAC.	UNIT COST	INSTALL COST	TOTAL COST
VAULTS	130	25	5.20	\$55,000	\$110,000	\$858,000
GENERATORS	130	25	5.20	\$25,000	\$5,000	\$156,000
MOBILE RADIOS	1970	10	197.00	\$2,500	\$135	\$519,095
PORTABLE RADIOS	2050	7	292.86	\$2,000	\$65	\$604,750
MOBILE RELAYS	245	10	24.50	\$7,500	\$10,000	\$428,750
REMOTE CONTROLS	285	10	28.50	\$500	\$640	\$32,490
RADIO MONITORS	325	10	32.50	\$1,000	\$2,000	\$97,500
CONSOLES	81	10	8.10	\$117,000	\$50,000	\$1,352,700
FIRE STATION RADIOS	310	10	31.00	\$3,000	\$13,000	\$496,000
AIRCRAFT RADIOS	50	10	5.00	\$39,000	\$2,000	\$205,000
HELICOPTER RADIOS	10	10	1.00	\$39,000	\$3,500	\$42,500
PA SYSTEMS	312	10	31.20	\$1,000	\$2,000	\$93,600
PORTABLE REPEATERS	35	10	3.50	\$3,500	\$0	\$12,250
LOGGING RECORDER	26	10	2.60	\$40,000	\$2,500	\$110,500
POWER SUPPLY	26	10	2.60	\$20,000	\$5,000	\$65,000
MASTER ELECTRONICS	26	10	2.60	\$25,000	\$15,000	\$104,000
WEATHER STATIONS	80	10	8.00	\$20,000	\$2,500	\$180,000
WEATHER STATION PARTS	1	1	1.00	\$30,000	\$0	\$30,000
TOWERS	130	25	5.20	\$90,000	\$90,000	\$936,000
PAGING ENCODERS	81	10	8.10	\$5,000	\$6,000	\$89,100
PAGERS	310	7	44.30	\$285	\$0	\$12,626
INCIDENT BASE RADIOS	27	10	2.70	\$14,100	\$6,000	\$54,270
TAPE RECORDER	81	10	8.10	\$3,000	\$6,000	\$72,900
ANTENNAS & CABLES	584	10	58.40	\$1,800	\$1,000	\$163,520
RADIO TRANS/RCVR	186	10	18.60	\$7,500	\$12,000	\$306,900
ECC DISPLAY EQUIP	25	5	5	\$35,000	\$0	\$175,000
<b>SUB TOTAL RADIO</b>						<b>\$7,198,451</b>

## TELEPHONE SYSTEMS

CAMPS	41	7	5.86	\$2,500	0	\$14,643
FIRE STATIONS	232	7	33.14	\$2,500	0	\$82,857
ECC TELEPHONE SYSTEMS	25	7	4.00	\$20,000	0	\$80,000
RANGER UNIT HQ	22	7	3.14	\$45,000	0	\$141,429
REGION HQ	2	7	0.29	\$45,000	0	\$12,857
SACRAMENTO HQ	1	7	0.14	\$300,000	0	\$42,857
AIR BASES	13	7	1.86	\$2,500	0	\$4,643
HELITACK BASES	9	7	1.29	\$2,500	0	\$3,214

SUB TOTAL TELEPHONE

**\$382,500**

TOTAL ANNUAL EQUIPMENT REPLACEMENT NEED

**\$7,580,951**

NOTE: REGION AND SACRAMENTO TELEPHONE REPLACEMENTS ARE SPREAD OUT OVER 7-YEAR PERIOD.  
EQUIPMENT AUTHORITY NEEDED IS \$4,848,471 FOR NORMAL REPLACEMENT.  
REMAINING \$2,732,480 IS FOR DGS-TD INSTALLATION AND ENGINEERING CHARGES.  
COSTS ARE BASED UPON RECENT PURCHASE DOCUMENTS AND DGS-TD ESTIMATES.

(see Table of Contents)